

### **III. REMARKS/ARGUMENTS**

#### **A. Status of the Application**

Claims 61 – 95 are canceled without prejudice or disclaimer, as Applicants intend to pursue the subject matter of these claims in a divisional application. The claims now pending are 1 – 27, 29 – 38, 40 – 60, and 96 – 115.

Effective as of the date of the Final Office Action mailed October 29, 2003, the present status of claims 1 – 27, 29 – 38, 40 – 60, and 96 – 115 is as follows: Claims 1 – 27, 29 – 30, 42 – 60, 96, 98 – 107 and 112 – 115 are allowed. Claims 31, 36 – 38, 41, 97 and 108 – 111 are rejected. Claims 32 – 35 and 40 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form.

Applicants appreciate and acknowledge the allowance of claims 1 – 27, 29 – 30, 42 – 60, 96, 98 – 107 and 112 – 115. The present amendment affects the claims as follows: Claims 31, 32, 34 – 36, 97, 108 and 110 are amended. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

#### **B. Rejection of Claim 97 under 35 U.S.C. §112, 2<sup>nd</sup> paragraph**

Claim 97 stands rejected under 35 U.S.C. §112, second paragraph. Claim 97 has been amended to properly depend from claim 96. In view of the foregoing, Applicants respectfully request that the rejection of claim 97 under 35 U.S.C. §112, second paragraph be withdrawn.

#### **C. Rejection of Claims 31, 36-38, 41 and 108-111 under 35 U.S.C. § 102(a)**

Claims 31, 36-38, 41 and 108-111 stand rejected under 35 U.S.C. § 102(a) over Stepanek et al ("Stepanek"). Insofar as it may be applied against the present claims, this rejection is respectfully traversed.

As provided in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim...." Therefore, Stepanek must disclose all of the elements of the claims to sustain the rejection of claims 31, 36-38, 41 and 108-111. However, Stepanek does not meet the standard required by MPEP § 2131 because Stepanek does not disclose or suggest each and every element of independent claim 31, or claims 36-38, 41 and 108-111, which depend therefrom.

Claim 31 as amended is drawn to a method for cutting nanotubes. The method comprises exposing at least one nanotube having a first length to a soluble solid organic

material, and using the soluble solid organic material to grind the nanotube to result in at least one shortened nanotube having a length that is shorter than the first length. The soluble solid organic material is soluble in at least one of an organic solvent and an inorganic solvent.

As stated in the Office Action, Stepanek discloses a process for cutting carbon nanotubes. According to the process disclosed by Stepanek, the nanotubes are ultrasonically dispersed in ethanol to obtain a homogeneous suspension. (*Stepanek* at p. 126). The homogeneous suspension is then poured on two diamond lapping film disks, and rubbed until the alcohol evaporation is complete. (*Stepanek* at p. 126).

Stepanek does not disclose or suggest a method for cutting nanotubes comprising exposing a nanotube to a soluble solid organic material, which is soluble in at least one of an organic or inorganic solvent, and then using the soluble solid organic material to grind the nanotube to result in a shortened nanotube. Accordingly, the rejection of claim 31 is improper because Stepanek does not disclose or suggest each and every element of the claim.

Claims 36-38, 41 and 108 - 111, each of which depends directly or indirectly from claim 31, also stand rejected over Stepanek. As to these dependent claims, the rejection is improper for at least the same reasons as discussed above with respect to claim 31. However, Applicants further argue the impropriety of the rejection with respect to claim 36 because Stepanek does not disclose or suggest a soluble solid organic material that acts as a dispersing reagent capable of dispersing a plurality of solid state nanotubes. As discussed above, the nanotubes according to the process of Stepanek are dispersed by sonication.

**D. Objection to Claim 32-35 and 40**

Applicants appreciate the indication in the Office Action that claims 32-35 and 40 would be allowable if rewritten in independent form. Claims 32 – 35 and 40 depend from claim 31. In view of at least the foregoing amendments and remarks with respect to claim 31, Applicants respectfully request the allowance of 32 – 35 and 40 in their present form.

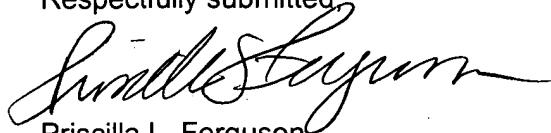
**E. Conclusion**

Claims 1 – 27, 29 – 38, 40 – 60, and 96 – 115 are currently under examination in the present application. In view of the foregoing amendments and remarks, reconsideration and allowance of all claims under examination is respectfully requested. The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such

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a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



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